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Announcement

Launch of a new section: Computational Algebra

Constructive or computational methods have always been a characteristic feature of algebra. With the introduction of algebraic structures in the 19th century, non-constructive methods came into play, and for some periods in the first half of the 20th century they dominated constructive methods. The rapid development of computer technology in the second half of that century led to a revival of constructive methods for investigating algebraic structures. This shift is reflected in the increasing number of papers submitted to the *Journal of Algebra* that make essential use of computer calculations or describe algorithms for computer calculations. To provide an appropriate forum for such contributions and to broaden the scope of the journal, we have introduced this new section.

An important general criterion for the publication of a paper in the new section will be its emphasis on constructive aspects in the creation or development of a theory or the solution of a problem.

The following kinds of contributions are particularly welcome in the new section of the *Journal of Algebra*:

- Papers in which constructive (computational) methods are essential for obtaining the results.
- Papers presenting results obtained by computer calculations. To be suitable for publication, such results must represent an advance of mathematics and exhibit new methods and mathematical conclusions.
- Papers that use computational methods to classify specific algebraic structures (in the form of tables, if appropriate).
- Descriptions and outcomes of experiments that put forward new conjectures, support existing conjectures, or give counterexamples to existing conjectures.
- Description and analysis of new algorithms, improvements and extensions of existing algorithms, or description of other computational methods, including practical experiments and heuristic arguments.

Contributions are encouraged from all areas of *mathematics*, if the emphasis is on algebraic aspects. Contributions describing applications of algebraic results or methods, for

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example, in *coding theory, cryptography*, or the algebraic theory of *differential equations*, are highly welcome.

The contributions will be available in print, as well as in electronic form through ScienceDirect. The electronic version may contain additional material such as extensive tables or animated pictures.

Instructions for submitting to the *Journal of Algebra* and the new section can be found at www.elsevier.com/locate/jalgebra.